

AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-17; amend Claims 18-29; and add new Claims 30-46 as follows.

LISTING OF CLAIMS

1.-17. (cancelled)

18. (currently amended) A manufacturing managing method comprising, as a basic managing pattern, the steps of:

designating [[each]] a plurality of manufacturing [[lot]] lots containing at least one workpiece as a main objective to be managed;

loading ~~an appropriate~~ a specified number of different type manufacturing lots on a carrier, said different type manufacturing lots containing workpieces having different work conditions; and

transporting said carrier to an apparatus that is capable of simultaneously bringing the workpieces into in-process work steps of different conditions, so as to cause said workpieces contained in respective different type manufacturing lots to pass along a plurality of manufacturing process flows.

19. (currently amended) The manufacturing managing method in accordance with claim 18, further comprising a step of making a judgment before starting the in-process work step in said apparatus as to whether or not said workpieces contained in said plurality of manufacturing lots should be loaded on said carrier.

20. (currently amended) The manufacturing managing method in accordance with claim 19, further comprising a step of further loading ~~additional workpieces at least one workpiece~~ of at least one additional manufacturing lot on the carrier under a condition that the ~~workpieces at least one workpiece~~ contained in ~~said plurality of a respective manufacturing lots~~ are already loaded on the carrier before said carrier is transported to an apparatus that has the capability of processing an increased number of workpieces.

21. (currently amended) The manufacturing managing method in accordance with claim 18, further comprising a step of making a judgment after finishing the in-process work step in said apparatus as to whether or not the ~~workpieces at least one workpiece of a predetermined specified number of manufacturing lots~~ should be unloaded from said carrier under a condition that the ~~workpieces at least one workpiece~~ contained in ~~said plurality of respective manufacturing lots~~ are loaded on said carrier.

22. (currently amended) The manufacturing managing method in accordance with claim 21, further comprising a step of unloading the ~~workpieces at least one workpiece of a specific manufacturing lot beforehand when said specific manufacturing~~ lot cannot be processed together with other lots in ~~the next a subsequent~~ manufacturing process flow.

23. (currently amended) The manufacturing managing method in accordance with claim 18, further comprising a step of unloading the ~~workpieces at least one~~

workpiece of at least one specific manufacturing lot under a condition that the workpieces at least one workpiece contained in the plurality of respective manufacturing lots are already loaded on said carrier and a step of loading required workpieces of another other manufacturing lots on said carrier, thereby repacking the workpieces on the carrier before starting the in-process work step in said apparatus.

24. (currently amended) The manufacturing managing method in accordance with claim 18, further comprising a step of unloading unloading part of workpieces the at least one workpiece in the same a specific manufacturing lot before starting the in-process work step in said apparatus in such a manner that an original lot number of each unloaded workpiece can be identified later from a condition that the workpieces at least one workpiece contained in the plurality of respective manufacturing lots are loaded on said carrier, and a step of loading another other workpieces of at least one [[new]] lot on said carrier.

25. (currently amended) The manufacturing managing method in accordance with claim 18, further comprising a step of temporarily stopping or decelerating said carrier at a mix-loading waiting point provided adjacent to said apparatus and a step of make a judgment as to whether or not the workpiece at least one workpiece contained in the plurality of respective lots are loadable on said carrier.

26. (currently amended) The manufacturing managing method in accordance with claim 18, wherein said apparatus restricts the loading of workpieces at least one workpiece contained in a plurality of lots specific manufacturing lot onto said carrier.

27. (currently amended) The manufacturing managing method in accordance with claim 18, wherein the loading of workpieces at least one workpiece contained in a plurality of lots specific manufacturing lot onto said carrier is restricted based on at least either one of a product name and a fundamental process flow.

28. (currently amended) The manufacturing managing method in accordance with claim 18, wherein the loading of workpieces at least one workpiece contained in a plurality of lots specific manufacturing lot onto said carrier is restricted based on a carrier type.

29. (currently amended) The manufacturing managing method in accordance with claim 24, wherein a second specific manufacturing lot is continuously loaded on the same a carrier when unloading of said first specific manufacturing lot is prohibited beforehand.

30. (new) A manufacturing managing method comprising, as a basic managing pattern, the steps of:

providing a plurality of manufacturing lots;

designating each manufacturing lot of the plurality of manufacturing lots containing at least one workpiece as a main objective to be managed; and

loading a specified number of manufacturing lots on a carrier so as to cause said at least one workpiece contained in respective manufacturing lots to pass along a plurality of manufacturing process flows.

31. (new) The manufacturing managing method in accordance with claim 30, wherein the at least one workpiece contained in respective lots and once loaded on said carrier are managed as a lot group.

32. (new) The manufacturing managing method in accordance with claim 30, wherein a loading of workpieces onto said carrier by using a new lot is prohibited.

33. (new) The manufacturing managing method in accordance with claim 30, wherein a loading of workpieces contained in other manufacturing lots is prohibited when a specific manufacturing lot to be processed urgently is loaded on said carrier.

34. (new) The manufacturing managing method in accordance with claim 30, wherein

in a case that a first system using a one-to-one relationship for managing the carrier and the manufacturing lot coexists with a second system using a 1-to-n (n is an integer not smaller than 1) relationship for managing the carrier and the manufacturing lot,

said manufacturing method comprises:

a step of assigning an original carrier number and an original lot number to one carrier and its lot in said first system and also assigning a pseudo carrier number and a pseudo lot number to other carrier and its lot, thereby realizing a dummy one-to-one management applied to the carrier and the manufacturing lot.

35. (new) A manufacturing managing method comprising, as a basic managing pattern, the steps of:

providing a plurality of manufacturing lots;

designating each manufacturing lot of the plurality of manufacturing lots containing at least one workpiece as a main objective to be managed;

loading a specified number of same type manufacturing lots on a carrier, said same type manufacturing lots containing workpieces having the same work conditions in at least one work step; and

transporting said carrier to a first apparatus that performs batch processing or machining operation applied to said workpieces or to a second apparatus that brings said workpieces into an in-process work step under the same conditions, so as to cause said workpieces contained in respective same type manufacturing lots to pass along a plurality of manufacturing process flows.

36. (new) The manufacturing managing method in accordance with claim 35, further comprising a step of making a judgment before starting the in-process work step

in said first or second apparatus as to whether or not said at least one workpiece contained in said plurality of manufacturing lots should be loaded on said carrier.

37. (new) The manufacturing managing method in accordance with claim 36, further comprising a step of further loading additional workpieces of at least one manufacturing lot on the carrier under a condition that the workpieces contained in respective manufacturing lots are already loaded on the carrier before said carrier is transported to an apparatus that has the capability of processing an increased number of workpieces.

38. (new) The manufacturing managing method in accordance with claim 35, further comprising a step of making a judgment after finishing the operation in said first or second apparatus as to whether or not the workpieces of a predetermined number of manufacturing lots should be unloaded from said carrier under a condition that the at least one workpiece contained in respective manufacturing lots are loaded on said carrier.

39. (new) The manufacturing managing method in accordance with claim 38, further comprising a step of unloading the at least one workpiece of a specific manufacturing lot beforehand when said specific manufacturing lot cannot be processed together with other lots in a subsequent manufacturing process flow.

40. (new) The manufacturing managing method in accordance with claim 35, further comprising a step of unloading the at least one workpiece of at least one specific manufacturing lot under a condition that the at least one workpiece contained in respective manufacturing lots are already loaded on said carrier and a step of loading required workpieces of other lots on said carrier, thereby repacking the workpieces on the carrier before starting the operation in said first or second apparatus.

41. (new) The manufacturing managing method in accordance with claim 35, further comprising a step of unloading part of the at least one workpiece in a specific manufacturing lot before starting the operator in said first or second apparatus in such a manner that an original lot number of each unloaded workpiece can be identified later from a condition that the at least one workpiece contained in respective manufacturing lots are loaded on said carrier, and a step of loading other workpieces of at least one lot on said carrier.

42. (new) The manufacturing managing method in accordance with claim 41, wherein a specific manufacturing lot is continuously loaded on the same carrier when unloading of said specific manufacturing lot is prohibited beforehand.

43. (new) The manufacturing managing method in accordance with claim 35, further comprising a step of temporarily stopping or decelerating said carrier at a mix-loading waiting point provided adjacent to said first or second apparatus and a step of

make a judgment as to whether or not the at least one workpiece contained in respective manufacturing lots are loadable on said carrier.

44. (new) The manufacturing managing method in accordance with claim 35, wherein said first or second apparatus restricts the loading of the at least one workpiece contained in a specific manufacturing lot onto said carrier.

45. (new) The manufacturing managing method in accordance with claim 35, wherein the loading of the at least one workpiece contained in a specific manufacturing lot onto said carrier is restricted based on at least either one of a product name and a fundamental process flow.

46. (new) The manufacturing managing method in accordance with claim 35, wherein the loading of the at least one workpiece contained in a specific manufacturing lot onto said carrier is restricted based on a carrier type.